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| APPLICATION NO. | FILING DATE | · FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|-------------------------|---------------------|------------------|
| 10/644,762 | 08/21/2003 | Franklin F.K. Tong | 20229.0013 | 7289 |
| 23517 | 7590 04/05/2005 | | EXAMINER | |
| SWIDLER BERLIN LLP 3000 K STREET, NW | | | RAHLL, JERRY T | |
| BOX IP | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20007 | | | 2874 | |
| | | DATE MAILED: 04/05/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | | | | |
|--|--|------------------------------|--|--|--|--|
| Office Action Comments | 10/644,762 | TONG ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Jerry T. Rahll | 2874 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 30 Do | <u>cember 2003</u> . | | | | | |
| | | | | | | |
| 3) Since this application is in condition for allowan | ice except for formal matters, pro | secution as to the merits is | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 33 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-17 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdraw | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1,2,6,7,9,10,12-14,16 and 17</u> is/are re | jected. | | | | | |
| 7) Claim(s) <u>3-5,8,11 and 15</u> is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10)⊠ The drawing(s) filed on <u>30 December 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da | | | | | |

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DETAILED ACTION

Drawings

1. The drawings are objected to because the drawings are not clear. It appears that they are either a poor-quality photocopy or the backgrounds for the figures cause details to be obscured. Additionally, some labels seem to obscure portions of the figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 3. Claims 1-2, 6-7, 9, 12-13 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,767,141 to Dudek et al.
- Dudek et al. describes an optical assembly having a connector body (86, 218) with two pin bores (98) extending from a first surface (100) to a second surface (96) and an array of bores (88) situated between the pin bores (98) extending from the first surface (96) to the second surface (100); optical fibers positioned within at least some of the bores (see Column 6 Line 36); a substrate (216 including two canals (238) formed in a substrate surface and extending from the substrate; centering pins (84) positioned in the pin bores (98) and canals (238)connecting the connector body (218) to the substrate (216); and an active optical component (vertical emitting optical component-12 and monitoring diode-26) mounted on the substrate (216) engaged in optical communication with at least some of the fibers (see Figures 5, 6 and 29 and Columns 6, 7, 10 and 12).
- 5. Further, Dudek et al. describes the connector body (86, 218) having a central cavity (92) extending from a third surface of the body to the array of bores (88).
- 6. Further, Dudek et al. describes the connector body (86, 218) having a beveled surface (94) extending from the second surface (96) toward the first surface (100) and intersecting the second surface (96) adjacent to the array of bores (88).
- 7. Further, Dudek et al. describes the assembly having a cover (220) positioned around the substrate (216).

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek et al. Dudek et al. describes an optical assembly as discussed above.
- 10. Dudek et al. does not specifically describe the active optical component as a horizontal emitting active optical component. However, Dudek et al. does suggest that lasers different than the exemplary VCSEL lasers shown in the preferred embodiment may be used (see Column 2 Lines 45-50). The examiner takes official notice that besides VCSEL lasers, horizontal emitting lasers are the main type of lasers known and used in the art. Therefore, it would have been obvious to one of ordinary to one of ordinary skill in the art to follow the suggestion Dudek et al. and use a horizontal emitting laser in place of the VCSELs shown in the described embodiment.
- 11. Further, Dudek et al. does not describe an optical component mounted n the substrate for receiving a beam. However, the examiner takes official notice that it is a basic operating principal of optical assemblies that optical paths may operate in either direction, and that an optical detector can be positioned identically in relation to an optical path as am optical emitter to receive an optical beam instead of emit an optical beam, respectively. Therefore, it would have been obvious to one of ordinary skill in the art to use the assembly set up of Dudek et al. to receive an optical beam to an active optical component instead of emitting an optical beam from the VCSELs described as described by Dudek et al.

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Allowable Subject Matter

12. Claims 3-5, 8, 11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 3-5 and 8 describe a pair of cavities that extend form the thirds surface of the body to the pin bores. Claims 11 and 15 describe a lens component mounted to the substrate between the active optical component and the edge of the substrate. This is subject matter not disclosed or reasonably suggested by the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jerry T Rahll

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